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10/593,932	11/23/2006	Tatsuo Sasazaki	KIYO-48	3411

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EXAMINER	
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ART UNIT	PAPER NUMBER
2887	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,932	SASAZAKI, TATSUO	
	Examiner	Art Unit	
	Tuyen Kim Vo	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 May 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21 and 24-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21 and 24-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/18/2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 05/18/2010 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 24-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification, as originally filed, does not provide support for the recitation of “neither bonding material nor adhesive material” as recited in claim 24, last two lines. For purpose of examination, it is assumed that the claim recites using bonding material or adhesive material as described in the specification para [0043].

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 21 and 27-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 24 recites the limitation "the interface" in 29. There is insufficient antecedent basis for this limitation in the claim. Moreover, the recitation of "the interface" is unclear of how it is related to other elements in the claim.

Re claim 27, the recitation of the claim is contradicting with the recitation as previously recited in claim 24.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 21, 24-26, 28 and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Muirhead (US 6,943,678, cited by applicant).

Re claim 21, Muirhead teaches a cut sheet (fig. 6) having an IC-tag tape along its entire length, the cut sheet being formed by the steps of: preparing a tape reel (fig. 6) of an IC-tag tape to which IC tags (18, fig. 4) are attached with such an IC tag pitch that each cut sheet includes at least one IC tag (fig. 8), unwinding the IC-tag tape from the

tape reel that is held by a reel stand (40, figs. 5 and 6) and providing the IC-tag in the machine direction to attach the IC-tag tape to a successive sheet material (plastic sheet), and cutting the successive sheet material into the cut sheets with a predetermined length in the machine direction, wherein the cut sheet includes an upper sheet material (figs. 10 and 11) that forms a first side of the cut sheet and a lower sheet material (figs. 10 and 11) that forms a second side of the cut sheet opposite to the first side, wherein the IC-tag tape is successively attached to the first side or to the second side of the cut sheet ,wherein the IC-tag tape is configured to be used as a successive tape for the cut sheet, wherein the cut sheet is made of a corrugated board (cardboard which serves as corrugated board, column 17, lines 6-9) comprising a second linerboard (12, fig. 11), a first linerboard (10, fig. 11) that forms the opposite side of said cut sheet with respect to said second linerboard, and a corrugated medium (94, fig. 11) that is positioned between said second linerboard and said first linerboard, wherein said IC-tag tape (18, fig. 11) is positioned between said corrugated medium and said second linerboard, wherein the interface between said IC-tag tape and said second linerboard forms an unconnected area (fig. 11), and wherein said unconnected area has a width that does not reduce the compressive strength of the cut sheet formed from said corrugated board (figs. 2, 4-8, 10 and 11; column 6, line 27 to column 9, line 36).

Re claim 24, Muirhead teaches a cut sheet (fig. 11) having an IC-tag tape (18) along its entire length, the cut sheet being formed from a successive sheet material by the steps of: selecting a tape reel (fig. 5) of an IC-tag tape to which IC tags (16) are attached with such an IC-tag-pitch that each cut sheet includes at least one IC

tag, unwinding said IC-tag tape from said tape reel that is held by a reel stand (40) and providing said IC-tag tape in the machine direction to attach said IC-tag tape to a successive sheet material, and cutting said successive sheet material into said cut sheets with a predetermined length in the machine direction, wherein said cut sheet includes a plurality of layers (figs. 10 and 11), and wherein said IC-tag tape is positioned and attached between said plurality of layers using bonding material or adhesive material (column 7, lines 9-44) (see figs. 2, 4-8, 10 and 11; column 6, line 27 to column 9, line 36).

Re claim 25, Muirhead further teaches wherein the plurality of layers consists of wet web, wherein the IC-tag tape is attaches to the cut sheet by inserting the IC-tag tape between the layers of wet web to be made into the successive sheet material before drying the wet web (see figs. 2, 10 and 11 and column 7, line 60 to column 8, line 31).

Re claim 26, Muirhead further teaches wherein said cut sheet is made of a plastic corrugated board, and wherein said IC tag tape is attached to said cut sheet by putting said IC tag tape on a hot melted part of said plastic corrugated board (see column 7, lines 9-32 and column 17, lines 1-13).

Re claim 28, Muirhead further teaches wherein the cut sheet is desirably shaped during a die-cutting process cutting after the successive sheet material into the cut sheets (see column 11, line 52 to column 12, line 6).

Re claim 35, same rationale as applied to claims 21 and 24.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claim 27 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muirhead.

Re claim 27, Muirhead teaches all subject matter claimed as applied above.

Muirhead fail to teach wherein the IC-tag tape is attached between the plurality of layers using starch paste or vinyl acetate emulsion.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of Muirhead to use the starch paste or vinyl acetate emulsion as the adhesive material since it is well known in the art that starch paste or vinyl acetate emulsion can be used as adhesive material, and further such materials are just another type of adhesive material.

Re claims 32-34, Muirhead teaches all subject matter claimed as applied above. Muirhead fails to teach the dimensions of the IC-tag pitch or the IC-tag tape as recited.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of Muirhead to select the dimensions as recited since it is just a matter of selecting the length or dimension or size of the IC tag pitch or IC tag tape to be fitted to the desired size of the sheet material.

11. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muirhead in view of Winter (US 2005/0021172, previously cited).

Re claim 29, Muirhead teaches all subject matter claimed as applied above. Muirhead fails to teach limitations as recited in claim 29.

However, Winter teaches wherein the successive sheet material passed below an encoder [0071] before the successive sheet material is cut into the cut sheets, wherein the encoder send signal to a production control device (66, fig. 8), the signals indicating the length of the successive sheet material that has passed below the encoder, wherein a detecting means ([0071]) sends location signals to the production control device, the signal indicating the location of the IC tag that is attached to the successive sheet material, wherein the production control device calculates whether the IC tags are position in an area to be trimmed during the die-cutting process using the signals from the encoder and from the detecting means. See fig. 8 and [0063]-[0076].

In view of Winter's teaching, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of

Muirhead to provide the functions and processes of programming of die-cutting processes as taught by Winter so that the machine/system can be automatically programmed to cut the cut sheet at the predetermined length without the need of the operator.

Re claim 30, Muirhead teaches all subject matter claimed as applied above. Muirhead fails to teach limitations as recited in claim 30.

However, Winter teaches all subject matter claimed as applied above. Winter further teaches wherein the successive sheet material passed below an encoder [0071] before the successive sheet material is cut into the cut sheets, wherein the encoder sends signals to a production device (66, fig. 8), the signals indicating the length of the successive sheet material that has passed below the encoder, wherein an interrogator ([0069]) with a radio antenna sends location signals to the production control device, the signals indicating the location of the IC tag that is attached to the successive sheet material, wherein the cut sheet is desirably shaped during a die-cutting process after cutting the successive sheet material into the cut sheets ([0008], [0048], [0050] and [0070]), and wherein the production control device calculates whether the IC tag are positioned in an area to be trimmed during the die-cutting process using the signals from the encoder and from the interrogator with a radio antenna. See fig. 8 and [0063]-[0076].

In view of Winter's teaching, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of Muirhead to provide the functions and processes of programming of die-cutting

processes as taught by Winter so that the machine/system can be automatically programmed to cut the cut sheet at the predetermined length without the need of the operator.

Re claim 31, Muirhead teaches all subject matter claimed as applied above.

Muirhead fails to teach the IC-tag tape is formed by printing an electronic circuit on a plastic tape substrate, wherein said electronic circuit is covered with a protecting coat.

However, Winter teaches wherein the IC-tag tape is formed by printing an electronic circuit on plastic substrate, wherein the electronic circuit is covered with protecting coat. See [0006]-[0008], [0012], [0043], [0045] and [0066]-[0067].

In view of Winter's teaching, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system and method of Muirhead to provide an electronic circuit printed on the plastic sheet and cover with protecting coat as taught by Winter since it is just an alternative way of forming the IC-tag tap.

Response to Arguments

12. Applicant's arguments with respect to claims 21 and 24-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are

applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen Kim Vo whose telephone number is (571)270-1657. The examiner can normally be reached on Monday - Friday, 7:30a.m. - 5:00p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven S. Paik can be reached on (571) 272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. K. V./ /Thien M. Le/

Examiner, Art Unit 2887 Primary Examiner, Art Unit 2887